AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING THE CLAIMS:

1-7   (canceled)

8.   (currently amended) A method of call forwarding a call originally placed to a mobile telephone number of a mobile telephone to a landline telephone number of a landline telephone, wherein the call is routed through a telephone network by a service provider, the method comprising:

(a)   determining a forwarding location for the mobile telephone using a mobile location technology, the mobile location technology being capable of locating the mobile telephone using service provider equipment;

(b)   providing the landline telephone number of the landline telephone to the service provider;

(c)   determining a current mobile telephone location of the mobile telephone by the mobile location technology;

(d)   determining whether the call is being made to the mobile telephone when the current mobile telephone location is approximately at the forwarding location; and

(e)   forwarding the call to the mobile telephone number to the landline telephone number using the service provider equipment when the current mobile telephone location is approximately at the forwarding location;

~~The method according to claim 1,~~ wherein the mobile location technology is a time difference of arrival method having the steps of:

(i)   receiving a signal of the mobile telephone at a first antenna site having a first receiver, a second antenna site having a second receiver and a third antenna site having a third receiver;

(ii)   synchronizing the receivers by using a precision standard clock;

(iii)   determining a first time of arrival (TOA) when the signal reaches the first receiver, a second TOA when the signal reaches the second receiver and a third TOA when the signal reaches the third receiver;

(iv)   calculating a first time difference between the first TOA and the second TOA, a second time difference between the second TOA and the third TOA, and a third time difference between the third TOA and the first TOA; and

(v)   generating the current mobile telephone location expressed in longitude and latitude by using a geographic location algorithm, said geographic location algorithm being a function of a known transmission speed of the signal of the mobile telephone, the first, second and third time differences and geographic locations of the first, second and third antenna sites.

9.   (currently amended) <u>A method of call forwarding a call originally placed to a mobile telephone number of a mobile telephone to a landline telephone number of a landline telephone, wherein the call is routed through a telephone network by a service provider, the method comprising:</u>

<u>(a)   determining a forwarding location for the mobile telephone using a mobile location technology, the mobile location technology being capable of locating the mobile telephone using service provider equipment;</u>

(b)   providing the landline telephone number of the landline telephone to the service provider;

(c)   determining a current mobile telephone location of the mobile telephone by the mobile location technology;

(d)   determining whether the call is being made to the mobile telephone when the current mobile telephone location is approximately at the forwarding location; and

(e)   forwarding the call to the mobile telephone number to the landline telephone number using the service provider equipment when the current mobile telephone location is approximately at the forwarding location;

~~The method according to claim 1,~~ wherein the mobile location technology is an angle of arrival method having the steps of:

(i)   receiving a signal of the mobile telephone at a first antenna site having a first receiver and a second antenna site having a second receiver, wherein each of the receivers is capable of detecting compass direction;

(ii)   determining a first angle of arrival (AOA) when the signal reaches the first receiver and a second AOA when the signal reaches the second receiver;

(iii)   calculating an angular difference between the first AOA and the second AOA; and

(iv)   generating the current mobile telephone location expressed in longitude and latitude by using a geographic location algorithm, said geographic location algorithm being a function of the angular difference and geographic locations of the first and second antenna sites.

10.   (currently amended) A method of call forwarding a call originally placed to a mobile telephone number of a mobile telephone to a landline telephone number of a landline

telephone, wherein the call is routed through a telephone network by a service provider, the method comprising:

(a)   determining a forwarding location for the mobile telephone using a mobile location technology, the mobile location technology being capable of locating the mobile telephone using service provider equipment;

(b)   providing the landline telephone number of the landline telephone to the service provider;

(c)   determining a current mobile telephone location of the mobile telephone by the mobile location technology;

(d)   determining whether the call is being made to the mobile telephone when the current mobile telephone location is approximately at the forwarding location; and

(e)   forwarding the call to the mobile telephone number to the landline telephone number using the service provider equipment when the current mobile telephone location is approximately at the forwarding location;

~~The method according to claim 1,~~ wherein the mobile location technology is a location pattern matching method having the steps of:

(i)   creating a database of standard signal characteristics from a plurality of multipath radio frequency (RF) signals generated from a known mobile telephone at a first antenna site having a first antenna, a second antenna, and a multipath RF receiver, wherein each of the standard signal characteristics are associated with a known geographic location;

(ii)   receiving a signal of the mobile telephone at the first antenna site and generating a current signal characteristic;

(iii)   comparing the current signal characteristic to the database of standard signal

characteristics and determining a closest match signal characteristic from the standard signal

characteristics; and

(iv)   generating the current mobile telephone location expressed in longitude and

latitude by using the geographic location associated with the closest match signal characteristic

in the database of standard signal characteristics.

11-12. (canceled)

13.   (original) A method of call forwarding a call originally placed to a mobile

telephone number of a mobile telephone to a landline telephone number of a landline telephone,

wherein the call is routed through a telephone network by a service provider, the method

comprising:

(a)   determining a forwarding location of the mobile telephone using a mobile

location technology, the mobile location technology being capable of locating the mobile

telephone using service provider equipment;

(b)   providing the landline telephone number of the landline telephone to the service

provider;

(c)   determining a current mobile telephone location of the mobile telephone by the

mobile location technology;

(d)   determining whether the call is being made to the mobile telephone when the

current mobile telephone location is approximately at the forwarding location;

(e)   placing the call to the mobile telephone number and simultaneously forwarding

the call from the mobile telephone number to the landline telephone number using the service

provider equipment when the current mobile telephone location is approximately the forwarding location; and

(f) connecting the call to one of either the mobile telephone number or the landline telephone number when the mobile telephone number is answered or the landline telephone number is answered, respectively, and terminating the call to either the mobile telephone number or the landline telephone number that is unanswered.

14. (original) The method according to claim 13 further including the steps of:

(g) capturing the current mobile telephone location when the mobile telephone is powered off; and

(h) storing the current mobile telephone location when the mobile telephone is powered off in a last known location in a service provider database.

15. (original) The method according to claim 14 further including the steps of:

(i) determining whether the call is being made to the mobile telephone when the mobile telephone is powered off;

(j) determining if the last known location is approximately the forwarding location; and

(k) forwarding the call from the mobile telephone number to the landline telephone number using the service provider equipment only when the last known location is approximately the forwarding location.

16. (original) The method according to claim 14 further including the steps of:

(i) determining whether the call is being made to the mobile telephone when the mobile telephone is powered off;

(j)   determining if the last known location is a different location compared to the forwarding location; and

(k)   forwarding the call from the mobile telephone number to a voicemail box using the service provider equipment only when the last known location is the different location.

17.   (original) The method according to claim 13, wherein the step of determining the forwarding location of the mobile telephone using the mobile location technology is an initialization step.

18.   (original) The method according to claim 13, wherein the forwarding location is a list of a plurality of forwarding locations, wherein each of the forwarding locations has an associated landline telephone having a unique landline telephone number.

19.   (original) The method according to claim 13 further including the step of:

(g)   forwarding the call to a voicemail box associated with the mobile telephone number when the call is unanswered after a predetermined period of time.

20.   (original) The method according to claim 13, wherein the mobile location technology is a time difference of arrival method having the steps of:

(i)   receiving a signal of the mobile telephone at a first antenna site having a first receiver, a second antenna site having a second receiver and a third antenna site having a third receiver;

(ii)   synchronizing the receivers by using a precision standard clock;

(iii)   determining a first time of arrival (TOA) when the signal reaches the first receiver, a second TOA when the signal reaches the second receiver and a third TOA when the signal reaches the third receiver;

(iv)   calculating a first time difference between the first TOA and the second TOA, a second time difference between the second TOA and the third TOA, and a third time difference between the third TOA and the first TOA; and

(v)   generating the current mobile telephone location expressed in longitude and latitude by using a geographic location algorithm, said geographic location algorithm being a function of a known transmission speed of the signal of the mobile telephone, the first, second and third time differences and geographic locations of the first, second and third antenna sites.

21.   (original) The method according to claim 13, wherein the mobile location technology is an angle of arrival method having the steps of:

(i)   receiving a signal of the mobile telephone at a first antenna site having a first receiver and a second antenna site having a second receiver, wherein each of the receivers is capable of detecting compass direction;

(ii)   determining a first angle of arrival (AOA) when the signal reaches the first receiver and a second AOA when the signal reaches the second receiver;

(iii)   calculating an angular difference between the first AOA and the second AOA; and

(iv)   generating the current mobile telephone location expressed in longitude and latitude by using a geographic location algorithm, said geographic location algorithm being a function of the angular difference and geographic locations of the first and second antenna sites.

22.   (original) The method according to claim 13, wherein the mobile location technology is a location pattern matching method having the steps of:

(i)   creating a database of standard signal characteristics from a plurality of multipath radio frequency (RF) signals generated from a known mobile telephone at a first antenna site having a first antenna, a second antenna, and a multipath RF receiver, wherein each of the standard signal characteristics are associated with a known geographic location;

(ii)   receiving a signal of the mobile telephone at the first antenna site and generating a current signal characteristic;

(iii)   comparing the current signal characteristic to the database of standard signal characteristics and determining a closest match signal characteristic from the standard signal characteristics; and

(iv)   generating the current mobile telephone location expressed in longitude and latitude by using the geographic location associated with the closest match signal characteristic in the database of standard signal characteristics.

23.   (original) The method according to claim 13, wherein the mobile location technology is a global positioning system (GPS) method having the steps of:

(i)   providing a GPS satellite network which is capable of determining a geographic location expressed in longitude and latitude;

(ii)   providing a GPS transceiver in the mobile telephone that communicates to the GPS satellite network, the GPS satellite network determining the current mobile telephone location and transmitting the current mobile telephone location to the GPS transceiver; and

(iii)   receiving a mobile telephone signal from the mobile telephone at an antenna site having a mobile signal receiver, the mobile telephone signal including at least the current mobile telephone location.

24.   (original) The method according to claim 13, wherein the call routed to the landline telephone requires a user to enter a personal identification number when the landline telephone is answered and before the call can be completed to the landline telephone.